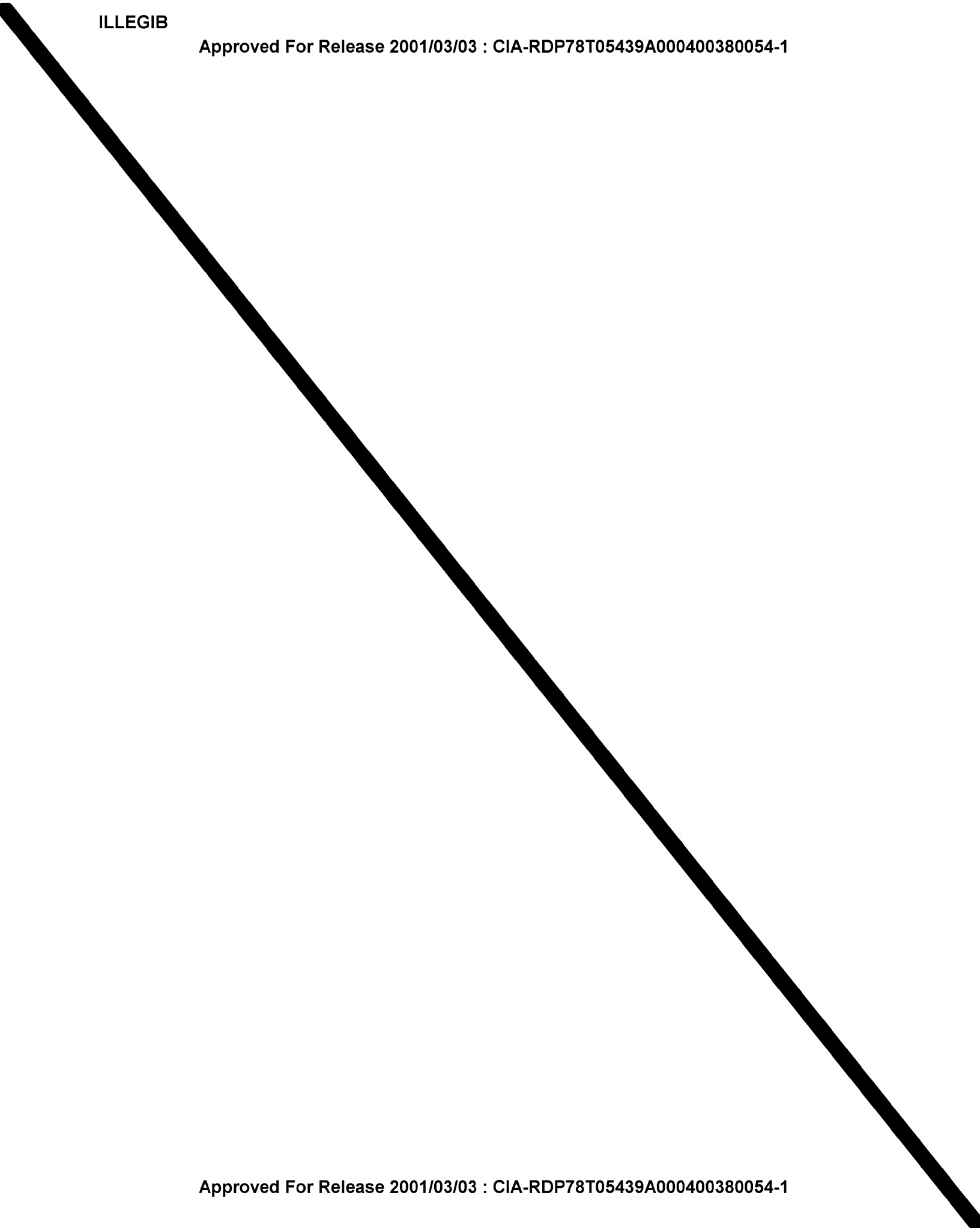

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TCS-80154/65
February 1965

PHOTOGRAPHIC INTERPRETATION REPORT

PROBABLE SOLID PROPELLANTS TEST FACILITY AND ASSOCIATED PRODUCTION FACILITY STERLITAMAK, USSR

CIA DIA

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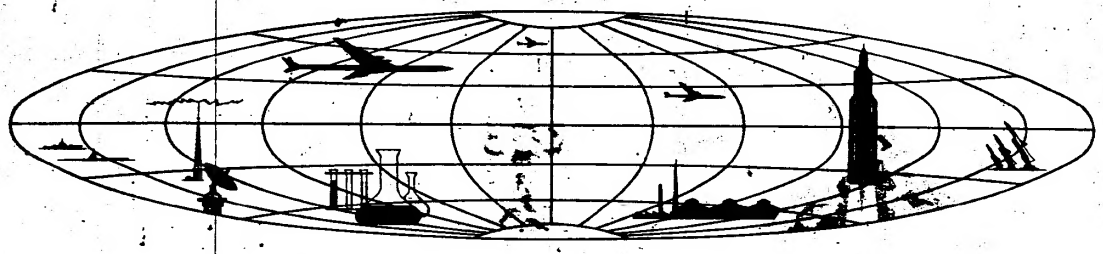

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TCS-80154/65

PROBABLE SOLID PROPELLANTS TEST FACILITY AND ASSOCIATED PRODUCTION FACILITY STERLITAMAK, USSR

INTRODUCTION

The purpose of this report is to present descriptions and interpretations of the Sterlitamak Probable Solid Propellants Test Facility and its associated production facility, Sterlitamak Explosives Plant No ~~500~~ 850

The test facility constitutes the northernmost part of Explosives Plant No ~~500~~ 850 (BE No [redacted] and is located approximately 7 nautical miles (nm) north of Sterlitamak, USSR, at 53-43N 55-57E (Figure 1). A separately secured explosives storage area is situated immediately east of the northern half of the explosives plant.

25X1A

PROBABLE SOLID PROPELLANTS TEST FACILITY

This test facility is enclosed within a wall and parallel fence that surrounds Explosives Plant No ~~500~~ 850 (Figures 2 and 3); an inner wall separates the test facility from the rest of the installation. Rail spurs serve the explosives plant, the test facility, and the explosives storage area. A perspective drawing of the test facility is shown on Figure 4.

The test facility contains the following principal items: an L-shaped test cell (item 1, Figure 3), a blast deflector with concrete facing, a large H-shaped building (item 2), 2 small revetted buildings, 3 large support buildings (items 3, 4, and 5), several smaller support buildings, and a shell-testing range. The H-shaped building may house research and development facilities and provide production and assembly facilities for solid fuel rockets and associated test equipment. The 2 small revetted buildings are probably used to store igniters and similar explosive items.

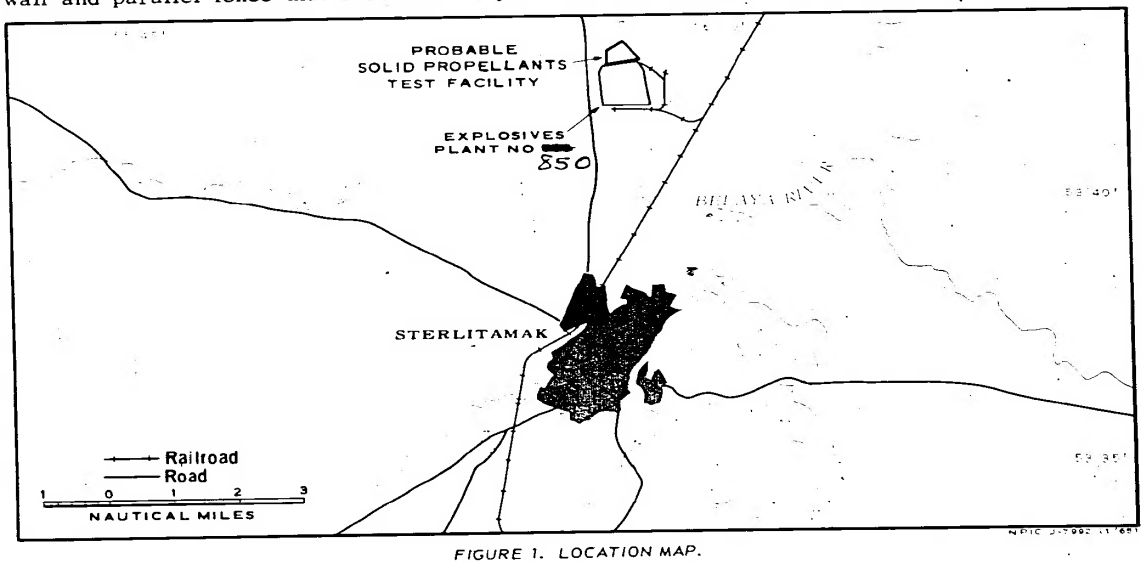

FIGURE 1. LOCATION MAP.

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The shell-testing range, which may antedate other components of the facility, consists of 2 or more small structures, an L-shaped revetment, and a bunker or backstop which is adjacent to the blast deflector associated with the test cell (Figure 3).

Immediately east of the inner wall separating the test facility from the explosives plant are 2 groups of offset buildings (items 6 and 7). Similar groups of offset buildings have been observed in association with other Soviet probable solid propellants test facilities at Krasnoyarsk, Biysk, Perm, and Kamensk-Shakhtinskiy. 1/ [redacted]

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25X1B
25X1D

The date construction began on this test facility is not known. The first usable coverage was in [redacted] and by that time the facility consisted of the test cell with its blast deflector, the H-shaped building, 3 support buildings, and the shell-testing range. [redacted] revealed a group of 3 offset buildings under construction (item 7, Figure 3) that had not been present the previous month.

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25X1D

[redacted] KEYHOLE missions covered the site in [redacted]. The second group of offset buildings (item 6) was seen on photography of [redacted] and 5 small buildings had been added by [redacted]

25X1D
25X1D

[redacted] during the [redacted] interval 3 buildings were constructed and some ground scarring took place northwest of the test cell. By [redacted] 2 storage buildings, one revetted and the other probably revetted, had been added. No further change had taken place in the facility in [redacted]

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EXPLOSIVES PLANT NO ~~580~~ 850

Expolsives Plant No ~~580~~ 850 was first seen on photography of [redacted] During the following year a considerable amount of new construction took place as was evident on photography of [redacted] Of particular significance was the addition of a possible casting facility (Figure 5) similar to facilities constructed during the same general period at other Soviet explosives plants (Perm, Krasnoyarsk, and Biysk) which also have probable solid propellants testing facilities. This facility consists of a long irregularly shaped structure flanked by 5 or more connected cylindrical structures, [redacted]

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25X1D
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25X1B
25X1B

A perspective drawing of a typical possible casting facility is presented on Figure 5.

The nature and location of the various new facilities first seen in [redacted] and the fact that the chronology of their development corresponds to the development of the Probable Solid Propellants Test Facility suggest that the existing plant was expanded to accommodate equipment used in the manufacture of large solid propellant grains. The location of the facilities indicates that production flow is along rail lines from the propellant production section to the curing and storage area, then to the possible temperature-conditioning (offset) buildings, and finally to the test facility (Figures 2 and 3). This arrangement indicates that at least most of the new facilities observed in [redacted] are intended for produc-

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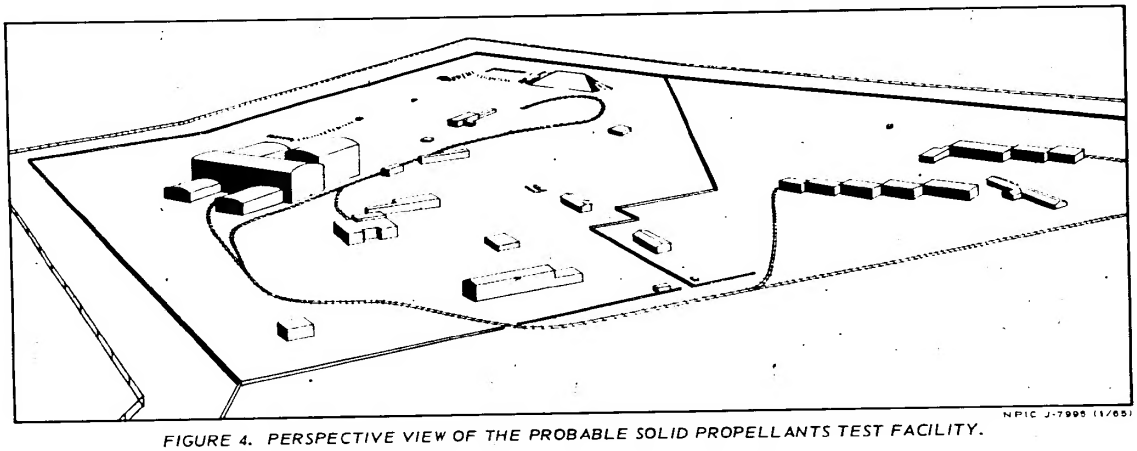

NPIC J-7995 (1/65)

FIGURE 4. PERSPECTIVE VIEW OF THE PROBABLE SOLID PROPELLANTS TEST FACILITY.

tion and testing of solid fuel rocket propel-

[redacted]

RELATIONSHIP BETWEEN THE EXPLOSIVES PLANT AND THE TEST FACILITY

The production of solid propellants at Plant ~~580~~ 850 for use in rocket propulsion is suggested by the presence of a probable solid propellants test facility, and the 2 sets of possible temperature conditioning buildings. Additional support for assigning a rocket propellant production capability to Plant ~~580~~ 850 is provided by the fact that the casting facility, several storage buildings, and the larger of the 2 temperature-conditioning facilities were all built during the same time period and were additions to a conventional double-base powder plant. Furthermore, all of these facilities can be seen to be interconnected by a rail system that also provides transportation to at least 3 of the major components of the test facility. It thus becomes possible to cast large propellant grains, move them into storage, take them from storage to the temperature conditioning facilities and thence to the test facility, all by means of the existing plant rail net.

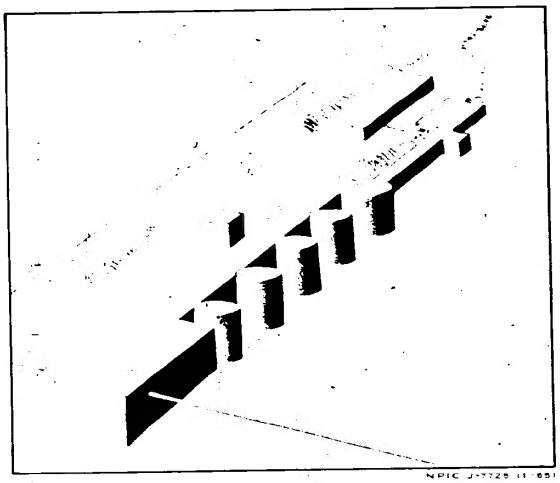

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FIGURE 5. PERSPECTIVE VIEW OF A POSSIBLE CASTING FACILITY.

Continuing construction activity in the test facility suggests that it is not yet complete and therefore not yet operational although it is possible that it may have been utilized to some extent prior to completion.

REFERENCES

25X1D

PHOTOGRAPHY

[redacted]

MAPS OR CHARTS

ACIC. US Air Target Chart, Series 200, Sheet 0165-15A, 1st ed, Sep 58, scale 1:200,000 (SECRET)

DOCUMENTS

1. CIA. PIR-17 63, *Probable Solid Propellants Testing Facilities and Associated Explosives Plants in the USSR*, Dec 63 (TOP SECRET RUFF)

REQUIREMENT

CIA. C-RR4-81,679

NPIC PROJECT

N-863 '64 (partial answer)